

Applicants : Thomas M. Kurth, et al.  
Appln. No. : 09/944,212  
Page : 2

RECEIVED  
CENTRAL FAX CENTER

MAR 26 2007

REMARKS

Claims 36, 37, 41-56, 60-62, and 76-82 are pending in the present application. Reconsideration of the pending claims is respectfully requested for the reasons discussed below.

In the Office Action mailed September 26, 2006, the Examiner quoted 35 U.S.C. §103(a), but said the claims were rejected as anticipated by Croft. Applicants believe the Examiner meant to reject all of the claims under 35 U.S.C. §103(a) as being unpatentable over Croft, U.S. Patent No. 5,688,860, in view of Grant and Hackh's Chemical Dictionary (GRANT et al.). Specifically, the Examiner stated the following:

Croft discloses polymer materials comprising the reaction product of isocyanate reactive materials, catalysts, plasticizers, extenders/crosslinkers, and other materials reading on the products as claimed as claimed [sic] by applicants (see column 10 line 60 - column 12 line 40, as well as, the entire document). Croft's disclosure sets forth materials and reactants as well as intermediates employed in the making of its products such that it is seen that esterification to the degree defined by the claims is met by Croft's disclosure, and this recitation in the claims does not distinguish the claims over the teachings of Croft.

Croft differs from applicants' claims in that its oils and derivatives are not blown. However, GRANT et al. (see page 89) discloses blowing oils to be a well known treatment of oils for purposes of providing well studied oxidization effects to the oils which are blown. Based on the disclosure of GRANT et al. and applicants' own admissions, it is held that it would have been obvious for one having ordinary skill in the art to have blown the vegetable oils of Croft in the manner disclosed by GRANT et al. for the purpose of obtaining reactants which have been oxidized and are prone to faster drying/curing in order to arrive at the products of applicants' claims with the expectation of success in the absence of a showing of new or unexpected results.

(Office Action mailed September 26, 2006, pp. 2-3).

In order to establish a *prima facie* case of obviousness, three criteria must be met. MPEP § 706.02(j). Firstly, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify

Applicants : Thomas M. Kurth, et al.  
Appln. No. : 09/944,212  
Page : 3

the reference or to combine reference teachings. *In re Fine*, 5 USPQ 2d, 1596 (Fed. Cir. 1988). Secondly, there must be a reasonable expectation of success. *In re Merck & Co., Inc.*, 231 USPQ 375 (Fed. Cir. 1986). Thirdly, the prior art reference (or references) must teach or suggest all the claim limitations. *In re Royka*, 180 USPQ 580 (CCPA 1974). Moreover, the burden is on the Examiner to create a *prima facie* case of obviousness, not the Applicant to provide reasons for patentability. *In re Fine*, 5 U.S.P.Q. 2d, 1596 (Fed. Cir. 1988). In the present case, the Examiner has cited the '860 patent to Croft as the primary reference. As discussed in Applicant's last Response of August 7, 2006, the '860 patent does disclose the use of soybean oil, but as a plasticizer, which, according to the '860 patent, "is preferably selected so as to be essentially inert with polyurethane/polyurea reaction products." ('860 patent, col. 11, lines 46-47). Moreover, there is no suggestion to combine references if a reference teaches away from its combination with another source. *In re Fine*, 5 U.S.P.Q. 2d, 1596 (Fed. Cir. 1988). In this case, the '860 patent clearly discloses that the soybean oil is to be used as an essentially inert ingredient. Accordingly, there would be no motivation to modify the soybean oil based upon this teaching of the '860 patent.

The Examiner fills the gap in the '860 patent, which the Examiner admits does not disclose the particular blown vegetable oils presently claimed, by arguing that the GRANT et al. reference and Applicant's admissions demonstrate the obviousness to one of ordinary skill in the art to have blown the vegetable oils of Croft in the manner disclosed by GRANT et al. As Applicant understands the Examiner's position, this is based upon the proposed purpose of obtaining reactants which are prone to faster drying/curing. However, drying/curing properties are based on free radical polymerization through double bonds and not condensation polymerization which is how a polyurethane is formed. Accordingly, not only does the '860 patent teach away from modification of the soybean oil by its use as a plasticizer, but the purpose of blowing oils according to GRANT et al. is not consistent with the type of reaction used to form a polyurethane. Additionally, Applicant respectfully submits that while Applicant provided the mechanism for blowing soybean oil to increase hydroxyl content in its August 7, 2006, Response, and that blowing the presently claimed vegetable oils, namely blown rapeseed oil, blown palm oil, blown cottonseed oil, and blown soybean oil increases

Applicants : Thomas M. Kurth, et al.  
Appln. No. : 09/944,212  
Page : 4

their number of hydroxyl groups, Applicant respectfully points out that blowing castor oil, for example, actually results in a decrease in the hydroxyl content of the castor oil as shown in the Castor Oil Specifications sheet from a castor oil supplier submitted with this Response as Exhibit 1.

Applicants note that 37 C.F.R. § 1.104(c)(2) states that "when a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained in each rejected claim specified." If the Examiner maintains the rejection of the present claims over the '860 patent to Croft, Applicants respectfully request the Examiner clearly explain the pertinence of the '860 patent as it relates to each of the claims. Presently, the Examiner has stated:

Croft's disclosure sets forth materials and reactants as well as intermediates employed in the making of its products such that it is seen that esterification to the degree defined by the claims is met by Croft's disclosure, and this recitation in the claims does not distinguish the claims over the teachings of Croft.

(Office Action mailed September 26, 2006, pp. 2-3). Applicants do not believe the cited portion of the '860 patent discloses the presently claimed esterified polyol, which is the reaction product of (1) a first polyol (the first polyol itself being the reaction product of a multifunctional alcohol, such as glycerin, butanediol, ethylene glycol, tripropylene glycol, dipropylene glycol or aliphatic amine tetrol (*see* claim 45)) and a second multifunctional compound, such as a saccharide compound (*see* claim 37) and (2) a blown vegetable oil of the blown vegetable oils listed in the claims. Accordingly, Applicants respectfully submit that the presently pending claims would not have been obvious to one of ordinary skill based upon the '860 patent to Croft for at least the above reasons.

Applicants : Thomas M. Kurth, et al.  
Appln. No. : 09/944,212  
Page : 5

The Applicant has made a concerted effort to place the present application in condition for allowance, and a notice to this effect is earnestly solicited. In the event there are any remaining formalities or other issues needing Applicant's assistance, Applicant requests the Examiner to call the undersigned attorney at (616) 949-9610.

Respectfully submitted,

THOMAS M. KURTH ET AL.

By: Price, Heneveld, Cooper,  
DeWitt & Litton, LLP

March 26, 2007  
Date



Todd A. Van Thomme  
Registration No. 44 285  
695 Kenmoor, S.E.  
Post Office Box 2567  
Grand Rapids, Michigan 49501  
(616) 949-9610

TAV/jrf  
Enclosure